

## 30-5-4 LANDSCAPING AND TREE PRESERVATION REQUIREMENTS

### 30-5-4.1 Applicability

(A) Exemptions: The requirements of Section 30-5-4 shall not apply to the uses and activities listed below. Any applicable requirements of Sections 30-7-1 (Water Supply Watershed Districts), 30-7-2 (General Watershed Areas), 30-7-3 (Watershed Critical Areas), and 30-7-4 (Soil Erosion and Sedimentation Control) still apply.

- 1) Existing or proposed single family detached dwellings on residentially zoned lots or two-family dwellings on their own lots;
- 2) Multifamily developments containing eight (8) or fewer dwelling units on a single zone (building) lot;
- 3) Properties within or surrounded by the Central Business (CB) District;
- 4) Property lines abutting utility easements in excess of sixty (60) feet in width and all railroad rights-of-way;
- 5) Property lines abutting dedicated street right-of-way, which has remained unopened for a period of at least fifteen (15) years;
- 6) Tree removal on three thousand (3,000) square feet or less, after the City Urban Forester or Enforcement Officer has determined that such removal is not associated with a forthcoming development proposal and will not be inconsistent with any plan previously approved by the City or County;
- 7) Property covered by an active forestry management plan written by a North Carolina Registered Forester, provided documentation has been furnished to the City Urban Forester.

(B) Application: These requirements shall apply to the following:

- 1) New Principal Building or Use: Principal buildings or open uses of land constructed, reconstructed, or established after June 30, 1992.
- 2) Changes in Use: Changes in use, which result in an increase of two (2) or more in the Land Use Classification number. The requirements of this section shall be applicable to the entire zone lot.
- 3) Expansions: All expansions of buildings, parking areas, or open uses of land, except the first three thousand (3,000) square feet of expansions to buildings, parking areas, or open uses of land existing on June 30, 1992. The requirements of this section shall be applicable only to the expansion.
- 4) Tree Disturbance: All other activities for which a Tree Disturbance Permit is required by Section 30-5-4.2(A) (Tree Disturbance Permit).

### 30-5-4.2 Tree Conservation Plan Procedures

(A) Tree Disturbance Permit: A Tree Disturbance Permit is an official authorization which shall be issued by the City simultaneous to the issuance of a grading permit and prior to any tree disturbing activities. Tree disturbing activities include cutting and/or damage to the Critical Root Zone of live

trees four (4) inches DBH or greater on sites not accompanied by a development plan, except as stated in 30-5-4.1(A) (Exemptions).

- 1) Requirements for a Tree Disturbance Permit:
  - a) Identify the Tree Conservation Area as specified in 30-5-4.4(A).
  - b) The Tree Conservation Area as required for a site based on lot size, as determined in 30-5-4.4(A) must be met.
  - c) Submit a Tree Protection Plan as specified in 30-5-4.2(A) 2) (Tree Protection Plan Approval).
- 2) Tree Protection Plan Approval: Approval of a tree protection plan is required for all projects, except those listed in subsection 30-5-4.1(A) (Exemptions), and shall be submitted along with all other necessary drawings to the Technical Review Committee. Tree protection items shall be included on all grading plans, erosion control plans and Tree Disturbance Permit plans.
- 3) Drawings shall identify the following items:
  - a) Boundaries of the required Tree Conservation Area;
  - b) Required planting yards;
  - c) Protected trees within the Tree Conservation Area including tree size and type;
  - d) Critical Root Zone of each proposed protected tree or group of trees;
  - e) Limits of clearing;
  - f) Grading;
  - g) Trenching;
  - h) Required tree protection measures including required fencing and signage;
  - i) Overhead and underground utilities and easements;
  - j) Areas of reforestation, if any;
  - k) Stream buffers, if any;
- 4) The following required notes shall be indicated on tree preservation plans, erosion control plans, grading plans and Tree Disturbance Permit plans in capital letters:
  - a) Contact the City Urban Forester to set up a pre-construction meeting prior to any tree disturbance.
  - b) All tree protection devices must be installed prior to inspection by the City Urban Forester or Enforcement Officer and prior to any tree disturbance activities.

- c) Removal or damage of trees in the Tree Conservation Area will be subject to the penalties established in 30-5-4.10 (Penalties) of the Section 30-5-4 Landscaping and Tree Preservation Requirements.
- 5) These plans shall be reviewed by the City Urban Forester or Enforcement Officer for conformance with applicable provisions of this Section, 30-5-4 Landscaping and Tree Preservation Requirements and for tree and vegetation viability. The plans will either be approved or returned for revisions. Reasons for return shall be noted on the proposed plan.
- 6) All tree protection measures shall be installed prior to inspection by the City Urban Forester or Enforcement Officer and prior to tree disturbance.
- 7) The City Urban Forester or Enforcement Officer will conduct follow-up site inspections for enforcement of the tree protection requirements of the UDO.

(B) Provisions for Preservation of Existing Trees:

- 1) General: Any existing tree or group of trees which stands within or near a required planting area and meets or exceeds the standards of Section 30-5-4 Landscaping and Tree Preservation Requirements may be used to satisfy the tree requirements of the planting area. The protection of tree stands, rather than individual trees, is strongly encouraged.
- 2) Protection of Existing Trees: To receive credit, trees must be protected from direct and indirect root damage and trunk and crown disturbance. The following standards shall apply:
  - a) The Tree Conservation Area shall include land within the Critical Root Zone as provided in this section.
  - b) Construction site activities such as parking, material storage, dirt stockpiling, concrete washout and other similar activities shall not be permitted within the Tree Conservation Area.
  - c) Changes that significantly raise the grade of soil adjacent to the Tree Conservation Area shall be avoided.
  - d) A reasonable effort should be made to have utility line trenches and similar uses avoid the Tree Conservation Area. Due to certain site conditions, where disturbance within the Tree Conservation Area is unavoidable, underground tunneling or directional boring of utilities is preferred. Trenching shall be used only as the last alternative and root pruning equipment specifically designed for that purpose shall be used.
  - e) Protective fencing shall be installed around the Tree Conservation Area prior to any tree disturbing activities. Such fences shall be at least four (4) feet high and shall consist of orange polyethylene safety fencing. Fencing shall remain in place until construction is complete and other landscaping has been installed, and the City Urban Forester or Enforcement Officer has approved its removal.
  - f) The Tree Conservation Area should be designated as such with "Tree Conservation Area" signs posted visibly on the outside of the fenced-in area. Signs may not be posted on the trees.

(C) Evaluation of Specimen Trees and Stand of Trees: Existing specimen trees and stands of trees must meet the following conditions to be considered for the Tree Conservation Area:

- 1) A life expectancy of greater than ten (10) years;
- 2) A relatively sound and solid trunk with no extensive decay;
- 3) No major insect or pathological problems.

(D) Dead or Unhealthy Trees:

- 1) No credit will be allowed for any dead tree, any tree in poor health, or any tree subjected to grade alterations.
- 2) Except for storm damage, the death of any tree used for preservation credit within five (5) years of site development shall require the landowner to plant new trees equal to the number of credited trees. After five (5) years any tree(s) that were used for preservation credit that die shall require a replacement canopy tree(s) be replanted in accordance with 30-5-4.9 (B) 1) (Canopy Tree Size).
- 3) The City Urban Forester may require trees left standing outside of the Tree Conservation Area to be removed if improperly protected or determined to be hazardous.

#### **30-5-4.3 Tree Conservation**

(A) Tree Conservation Area: A Tree Conservation Area (TCA) is one or more areas of a site which includes existing trees and their Critical Root Zones. The purpose of the TCA is to encourage the preservation of healthy trees that are four (4) inches or greater in diameter at breast height (DBH).

(B) Critical Root Zone: To preserve existing trees within the designated TCA, the Critical Root Zone of the trees shall be preserved. The Critical Root Zone will include a radius around the tree equal to one (1) foot for every one (1) inch of DBH from the tree trunk as measured at the ground level from the root flare. It is recommended to save the entire Critical Root Zone of each preserved tree. If the entire Critical Root Zone cannot be preserved, tree roots must be cut prior to grading of the site. Should the Critical Root Zone have to be disturbed, the disturbed area shall extend no closer to the protected tree's trunk than the distance specified below:

Diameter of Tree (DBH)	Minimum Distance
4 – 7.9 inches	1 foot for every 1 inch DBH
8 –22.9 inches	8 feet
23–22.9 inches	9 feet
30+ inches	10 feet

(C) Disturbance within the Critical Root Zone will be allowed only on one side of the tree(s) to be saved and only with prior approval by the City Urban Forester.

#### **30-5-4.4 Tree Conservation Area Determination**

(A) Extent of TCA: TCA shall be provided in accordance with the chart below. If trees of four (4) inches or greater DBH exist within or partially within these areas, such trees must be saved to the extent possible. The area will be designated TCA and shall not be disturbed except as allowed herein.

SIZE OF PARCEL	TCA REQUIRED TO INCLUDE
0-55,000 sq. ft.	1% of lot area, and be located within the required planting yard.
55,000 sq. ft.- 5 acres	All trees four (4) inches or greater DBH which are located within the required planting yards.
5.01 - 10 acres	All trees four (4) inches or greater DBH which are located within the required planting yard or within fifteen (15) feet of the side and rear property lines, whichever is greater.
Greater than 10 acres	All trees four (4) inches or greater DBH which are located within the required planting yard or within twenty-five (25) feet of the side and rear property lines, whichever is greater.

- (B) No development shall be required to have the TCA exceed fifteen percent (15%) of the total site.
- (C) If there are trees that meet the TCA requirements on other areas of the site, the landowner may request that the required TCA be designated around such trees instead of the usual locations.
- (D) Other Provisions: The requirements of this section may be modified to permit the establishment of the TCA (see 30-5-4.5 Tree Conservation Flexibility Standards).
- (E) Smaller Trees: Trees less than four (4) inches DBH within the TCA may be preserved at the landowner's option and counted toward planting yard requirements as provided herein.
- (F) TCA Selection: In selecting which existing tree stands are to be designated as TCA, the landowner shall give due consideration to building, parking lot, driveway, street and utility location as they relate to the practicality of preservation and shall use the following tree preservation priority list:
- 1) Existing stands of mature hardwoods as highest priority, then
  - 2) Existing stands of younger hardwoods, then
  - 3) Existing specimen trees (as determined by the City Urban Forester or Enforcement Officer), then
  - 4) Existing stands of hardwoods and pine mix, and lastly
  - 5) Existing stands of pine trees. Preservation of single pine trees is not encouraged.
- (G) If it is necessary to pick among two or more stands of trees within a category listed above, the following priority list shall be used:
- 1) Type A planting yards, as a first priority, then
  - 2) Type B planting yards, then
  - 3) Type C planting yards, then
  - 4) Type D planting yards, and lastly
  - 5) Street planting yards.
- (H) The following are permitted in the required TCA provided there is no disturbance to the critical root zone of the preserved trees.

- 1) Landscaping features including planting boxes, sculpture, arbors, trellises and birdbaths.
  - 2) Outdoor furniture, ornamental entry columns and gates, flagpoles, lampposts, address posts, mailboxes, public utility wires and poles, fences, retaining walls, or similar structures.
  - 3) Cornices, steps, canopies, overhanging eaves and gutters, window sills, bay windows or similar architectural features, chimneys and fireplaces, fire escapes, fire balconies, and fire towers which project not more than two and one-half (2 1/2) feet into any required TCA.
  - 4) Handicap ramps except for porches and landings.
  - 5) Steps not connected to any above-grade structure.
- (I) Tree Removal Inside the Critical Root Zone (TCA): Trees less than four (4) inches DBH not being preserved, undergrowth and plant material in poor condition may be removed from the TCA. No roots shall be removed from the TCA. Stumps may be removed only by grinding. All requests for tree removal within the TCA must have prior approval by the City Urban Forester or Enforcement Officer pursuant to the provisions of this chapter. However, in an emergency situation due to storm damage; to alleviate an imminent hazard to the health, safety and welfare of the citizens; or to repair property damage, prior approval for tree removal in previously approved designated areas is not required.
- (J) All removal of said material shall be done or supervised by an experienced urban forester, landscape architect or certified arborist, who will certify that the tree and root removal or pruning was done in accordance with standard arboricultural practices.
- (K) Any tree within the TCA including the Critical Root Zone, which the landowner chooses to remove or that must be removed due to poor health or impractical means of preservation shall be removed in a manner that is in accordance with standard arboricultural practice so as to cause as little disturbance or harm to those trees intended to be saved as practical.
- (L) Relationship of the TCA and Planting Yards:
- 1) All trees of appropriate size and type preserved in the TCA that are within the planting yard shall be credited toward meeting all or part of the planting yard requirements, except for the street planting yard where there shall be at least one canopy tree, existing or planted, within every fifty (50) linear feet of street planting yard, and the minimum eight (8) foot width shall not be reduced. Credits are to be given for required trees in the same planting yard as the tree(s) preserved in accordance with the chart below.

DBH of Existing Tree(s)	Number of Trees Credited
4 - 7.9 inches	1 tree
8 - 22.9 inches	2 trees
23 - 29.9 inches	3 trees
30+ inches	4 trees

- 2) Any area in a TCA shall count as a portion of a planting yard or parking lot planting area.
- 3) No new landscaping is required within a TCA unless it is contiguous to existing single family development and it is needed to shield abutting parking lots, access drives, loading areas and outside storage.

#### **30-5-4.5 Tree Conservation Flexibility Standards**

- (A) Stream Buffer Credits: Properties falling under the Stormwater Management Control Requirements which are required to maintain an undisturbed stream buffer may use some or all the buffer to satisfy the required TCA if that undisturbed stream buffer contains trees that are a minimum of four (4) inches in diameter at breast height (DBH).
- (B) Land Dedication: Land that is dedicated to the City that is contiguous to the property being developed may be used towards the tree preservation requirement, if the dedicated land contains trees that are a minimum of four (4) inches in diameter at breast height (DBH).
- (C) Reforestation Credits: In situations where TCA requirements cannot be met based on site conditions and when approved by the City Urban Forester, reforestation efforts on the property can be used to satisfy up to fifty percent (50%) of the required TCA.
- (D) Tree Preservation Adjacent to or Within the Parking Lot and Parking Lot Plantings: For new, expanded, or rebuilt parking lots where trees are being preserved adjacent to the parking lot in order to meet the parking lot planting requirements, trees preserved in a TCA and within eight (8) feet of the parking lot may be used to satisfy up to fifty percent (50%) of the required number of parking lot trees. TCA that is "notched into" corners or edges of a parking lot is deemed to be within the parking lot, not adjacent to it. Trees in the TCA counted toward planting yard requirements may not count for required parking lot trees. Extra trees in such locations do count. It is the landowner's option to save trees within the parking lot. In order to do so, the Critical Root Zone must be preserved. Credits for preserving parking lot trees are determined by the Critical Root Zone preserved for the tree being saved (see 30-5-4.3(B) Critical Root Zone). One tree for every two hundred (200) square feet of critical root zone preserved may be used to satisfy up to fifty percent (50%) of the required number of parking lot trees.
- (E) Reduction in Parking Requirements: To allow an existing development to retrofit parking to conform to the landscaping regulations, or to allow an existing or new development to preserve trees within or adjacent to a parking lot, the number of required off-street parking spaces may be reduced by the City Urban Forester or Enforcement Officer by up to ten percent (10%).
- (F) Waivers: The City Urban Forester or Enforcement Officer shall have the authority to allow reduced planting yards or to waive the planting yard requirements to allow for a greater TCA in another area or make other exceptions, which meet the spirit and intent of this section. Additionally, if the City Urban Forester or Enforcement Officer concludes that due to existing unusual or unique site characteristics, preserving some or all required trees in the TCA(s) would create an undue or unreasonable hardship, then the protection of some or all of required trees in the TCA(s) may be waived.

#### **30-5-4.6 Landscape Plan Procedures**

- (A) Landscaping Plan Approval: An applicant must receive approval of a landscape plan from the Enforcement Officer, except in accordance with Section 30-3-11.4(B)2) in which case a landscape plan must be submitted within ninety (90) days after issuance of the building permit.
- (B) Installation of Plant Materials:
  - 1) Installation of plant material shall occur prior to the issuance of a Certificate of Compliance.
  - 2) If at the time of a request for a Certificate of Compliance, the required planting areas are not complete and it can be determined that:
    - a) plant materials are unavailable,

- b) completion of the planting areas would jeopardize the health of the plant materials, or
- c) weather conditions prohibit completion of the planting areas, then the installation of plant materials may be deferred by the Enforcement Officer. The landowner shall submit a copy of a signed contract for installation of the required planting areas and may be required to post a surety equal to the amount of the contract. In no instance shall the surety be for a period greater than one hundred and eighty (180) days. The Enforcement Officer may issue a Temporary Certificate of Compliance but shall not issue a Certificate of Compliance until the planting areas have been completed and approved.

### **30-5-4.7 Planting Areas**

(A) Required Planting Areas: The following areas are required to be landscaped:

- 1) Planting yards;
- 2) Parking lots (excluding vehicle loading, storage, and display areas);
- 3) Areas with slopes steeper than 3:1.

(B) Planting Yard Descriptions:

- 1) Street Planting Yard: A planting area parallel to a public street designed to provide continuity of vegetation along the right-of-way and a pleasing view from the road. No more than fifteen percent (15%) of the street planting yard may be used for walkways or signs. Parking, merchandise display, and off-street loading are prohibited in the street planting yard.
- 2) Type A Planting Yard: A high-density screen intended to block substantially visual contact between adjacent uses and create spatial separation. A Type A planting yard reduces lighting and noise, which would otherwise intrude upon adjacent uses.
- 3) Type B Planting Yard: A medium density screen intended to partially block visual contact between uses and create spatial separation.
- 4) Type C Planting Yard: A low-density screen intended to partially block visual contact between uses and create spatial separation.
- 5) Type D Planting Yard: A peripheral planting strip intended to separate uses, provide vegetation in densely developed areas, and enhance the appearance of individual properties.
- 6) Parking Lot Plantings: Planting areas within and adjacent to parking areas designed to shade and improve the attractiveness of large areas of pavement.

(C) Reforestation of slopes steeper than 3:1.

- 1) Areas having slopes steeper than 3:1 must be reforested to provide tree cover over the entire area. The following standards apply:
  - a) Reforestation shall include a minimum of one (1) tree per two hundred (200) square feet of surface area and shall be made up of a mixture of deciduous



hardwood and evergreen trees that are a minimum of twelve (12) inches high at planting and approved by the Enforcement Officer or Urban Forester.

- b) The trunk of any required tree shall be no closer than ten (10) feet from any other existing tree.

#### **30-5-4.8 Planting Yard Determination**

(A) To determine the planting yards required by this Section 30-5-4 Landscaping and Tree Preservation Requirements, the following steps shall be taken:

- 1) Identify the classification of the proposed or expanded land use and of each existing adjacent land use(s) by using Table 30-4-5-1 (Permitted Use Schedule). A proposed land use is considered existing on an adjacent property when a building permit is issued. If a zone lot contains uses with different land use classifications, select the higher numbered classification. If the development qualifies as an integrated multiple use development (refer to definition in Section 30-2-2.7 (General)), the entire development shall be treated as a single zone lot for planting yard and TCA purposes and its land use classification (LUC) shall be that classification applicable to the highest number of uses in the development. (For example, an integrated shopping center containing seven (7) establishments with LUCs of "3" and three (3) establishments with LUCs of "4" shall be classified as a "3".)
- 2) Use the Planting Yard Chart, Table 30-5-4-1, to determine the appropriate letter designation for each planting yard.
- 3) Match the letter designation obtained from the Planting Yard Chart with the Planting Yard and Parking Lot Rate Chart, Table 30-5-4-2, to determine the types and numbers of shrubs and trees required.

(B) Calculation of street planting yards: Street planting yard rate and width calculations shall exclude access drives.

(C) Planting Yard Flexibility Standards:

- 1) Walls, a minimum of five (5) feet in height constructed of masonry, stone or pressure treated lumber, or an opaque fence, a minimum of five (5) feet in height, may be used to reduce the widths of the planting yards by ten (10) feet providing such reductions do not disturb the critical root zone of existing trees.
- 2) Understory trees shall be substituted for canopy trees at the rate of two (2) understory trees for every canopy tree planted within fifteen (15) feet of an overhead power line.
- 3) Canopy trees may be substituted for shrubs at the rate of one (1) canopy tree for eight (8) shrubs and understory trees may be substituted for shrubs at the rate of one (1) understory trees for five (5) shrubs if approved by the City Urban Forester or Enforcement Officer.
- 4) On lots of record, Prior to July 1, 1992 that are less than fifty-five thousand (55,000) sq. ft. in area, no development shall be required to place required landscaping on greater than fifteen percent (15%) of the site. (SEE APPENDIX 5 ILLUSTRATIONS.)

TABLE 30-5-4-1 PLANTING YARD CHART							
EXISTING ADJACENT USE(S)							
Proposed Use	Land Use Classification	Least Intensive	→	→	→	Most Intensive	
Least Intensive	1	*	*	*	*	*	*
↓	2	C	D	D	D	D	D
↓	3	B	B	D	D	D	D
↓	4	A	A	C	D	D	D
Most Intensive	5	A	A	B	C	D	D
* No Planting Yard Requirement							

TABLE 30-5-4-2 PLANTING YARD AND PARKING LOT RATE CHART						
PLANTING RATES						
Type	Average Width (ft.)	Minimum Width (ft.)	Maximum Width (ft.)	Canopy Tree Rate	Understory Tree Rate	Shrubs Rate
Street Yard	8	8	25	2/100 If	NA	17/100 If
Type A Yard	50	40	75	4/100 If (a)	10/100 If (b)	33/100 If (c)
Type B Yard	30	25	50	3/100 If	5/100 If	25/100 If
Type C Yard	20	15	40	2/100 If	3/100 If	17/100 If
Type D Yard	5	5	10		2/100 If	18/100 If
Parking Lot	NA	NA	NA	1/12 parking spaces	NA	NA
a) Twenty-five (25) feet on center. b) Ten (10) feet on center. c) Three (3) feet on center.						

#### 30-5-4.9 Planting Yard Design and Maintenance Standards

- (A) Plant Species: Species used in required planting yards and parking lots shall be of a locally adapted nature. Refer to the recommended plant species list, which includes water wise species, in Appendix 6 (Landscaping). Other species may be approved by the City Urban Forester or Enforcement Officer.
- (B) Plant Size: The size of the required plant species is dependant on whether it is drought tolerant or not drought tolerant. Specific plant sizes are listed below:
- 1) Canopy Tree Size: Water wise canopy trees, using required planting techniques must be a minimum of two (2) inches in caliper, measured six (6) inches above grade, when planted (See Section 30-5-4.9 (N)). When mature, a canopy tree should be forty (40) feet high and

have a minimum crown width of thirty (30) feet. Other canopy trees must be a minimum of three (3) inch caliper, measured six (6) inches above grade, when planted.

- 2) Understory Tree Size: Water wise understory trees must be a minimum of one (1) inch in caliper, measured six (6) inches above grade, when planted. (See section 30-5-4.9 (N)). When mature, an understory tree should be twenty-five (25) to forty (40) feet high. Other understory trees must be a minimum of two (2) inches in caliper measured six (6) inches above grade at the time of installation.
  - 3) Shrub Size and Type: All approved water wise shrubs, using required planting techniques planted parallel to the edge of parking lots, access drives, loading and unloading areas and outside storage shall be evergreen and installed at a minimum size of eighteen (18) inches, spread or height, and reach a minimum height of thirty-six (36) inches and a minimum spread of thirty (30) inches. (See section 30-5-4.9 (N)). Required water wise shrubs in other locations, outside of the areas listed above may be evergreen or deciduous, shall be three (3) gallon in size as per ANSI standards at the time of installation.
- (C) Parking Lot Planting Areas: For new parking lots, in order to meet the parking lot planting requirements, required canopy tree areas shall be located within the parking lots and adjacent to parking spaces as planting areas between rows of parking spaces, inside medians, at the end of parking bays, or in tree islands. The landowner may provide required planters using one or more of the planter sizes below. Each parking space must be entirely within the designated distance of a parking lot planter as specified below: Each parking lot planting area shall have a minimum inside dimension of seven (7) feet and shall have a minimum area of two hundred (200) square feet. Grouping of parking lot trees within the same island is strongly encouraged, even if this would decrease the number of islands otherwise built within the parking lot. The City Urban Forester or Enforcement Officer may approve a smaller island based on the mature height of that tree species. (See Appendix 6 (Landscaping))

Size of parking lot planter	Number of trees in planter	Distance
200-499 sq. ft.	1	100 ft.
500-899 sq. ft.	3	130 ft.
900+ sq. ft.	5	150 ft.

- (D) Grouping: Shrubs and trees may be grouped or clustered in the required planting yards, except for the perimeter landscaping adjacent to parking lots, outside storage, access drives and loading and unloading areas. The remainder of the materials shall be distributed throughout the planting yard. There shall be at least one row of evergreen shrubs or evergreen understory trees in all Type A planting yards.
- (E) Berm Size: Any berm shall have a minimum height of three (3) feet, a minimum crown width of three (3) feet and a side slope no greater than 3:1 (3 horizontal to 1 vertical).
- (F) Wall Planters: Wall planters shall be constructed of masonry, stone, or pressure treated lumber stamped for ground contact (AWPB LP-22 1980 or equivalent). The minimum height of the wall planter shall be thirty (30) inches. The minimum height of shrubs in the wall planter shall be six (6) inches. The effective planting area of the wall planter shall be four (4) feet in width. If the wall planter is to contain trees, the effective planting width shall be seven (7) feet.
- (G) Encroachments Permitted in Required Planting Yards and the TCA:
- 1) The following are permitted in required planting yards provided the landscaping requirements are met and there is no interference with any sight area:

- 2) Landscaping features, including but not limited to, ornamental pools, planting boxes, sculpture, arbors, trellises, and birdbaths.
  - 3) Pet shelters, at-grade patios, play equipment, outdoor furniture, ornamental entry columns and gates, flagpoles, lampposts, address posts, HVAC equipment, mailboxes, outdoor fireplaces, public utility wires and poles, pumps, wells, fences, retaining walls, or similar structures.
  - 4) Cornices, steps, canopies, overhanging eaves and gutters, window sills, bay windows or similar architectural features, chimneys and fireplaces, fire escapes, fire balconies, and fire towers may project not more than two and one-half (2 1/2) feet into any required planting yard, but in no case shall be closer than three (3) feet to any property line.
  - 5) Handicap ramps except for porches and landings.
  - 6) Steps not connected to any above-grade structure.
- (H) Setback Less Than Planting Yard: If the required building setback is less than the required planting yard width or TCA, the building setback shall control, reducing the required planting yard width only alongside the building. The planting rate of the required planting yard shall still apply.
- (I) Location of Planting Material Outside Shade of Building: Where a building is located less than ten (10) feet from a property line, and the planting yard would be heavily shaded by buildings on both sides of the property line, the required trees and shrubs may be planted outside the shaded area to improve survivability.
- (J) Obstructions: Landscaping shall not obstruct the view of motorists using any street, driveway, or parking aisle.
- (K) Location: Required trees and shrubs shall not be installed in street rights-of-way. Required trees and shrubs may be placed in water quality conservation easements. Required trees and shrubs may be planted in electric utility easements below overhead lines and in drainage maintenance and utility easements by approval of the Technical Review Committee.
- (L) Plant Protection: Whenever planting areas are adjacent to parking lots or drives, the planting areas shall be protected from damage by vehicles, lubricants, or fuels.
- (M) Maintenance: The landowner is responsible for maintaining all required plant materials and planting areas in good health and appearance. Any dead, unhealthy, or missing plants (preserved or planted) shall be replaced with new plant material equal to the number of credited trees planted or preserved, subject to the provisions of 30-5-4.2 (Provisions for Preservation of Existing Trees). This plant material shall be sized according to the requirements of Section 30-5-4.9 (Planting Yard Design and Maintenance Standards), and shall be replanted within one hundred and eighty (180) days with vegetation which conforms to the initial planting rates and standards.
- (N) Water wise Planting Techniques: The following soil preparation techniques shall be used for all required landscape areas.
- 1) Soil preparation for the entire landscape yard includes the addition of organic amendments tilled to a depth of eight (8) to twelve (12) inches.
  - 2) All plantings in the landscape yards shall be mulched, including interior parking lot islands less than five hundred (500) square feet to a depth of three (3) to four (4) inches. The mulch shall be free of trash and maintained weed free thereafter.

- 3) Earthen basins are constructed around the installed plants.
  - 4) Plants, as permitted by this Ordinance, are grouped together where possible.
  - 5) For establishment and survival, plants shall be watered in the first year of planting.
- (O) Irrigation: It is suggested that drip irrigation, which includes drip misters, be used for required landscaping planting beds during the required establishment period. After establishment, supplemental watering can be reduced and used on an as needed basis. Traditional spray irrigation is prohibited except for turf areas.
- (P) Pruning: All required trees shall be allowed to reach their mature size and shall be maintained at their mature size. Trimming and pruning shall be done in strict accordance with the American National Standards Institute (ANSI) standards. Topping is not an acceptable pruning practice. Topping is the reduction of a tree's size using heading cuts that shorten limbs or branches back to a predetermined crown limit. The City Urban Forester may require the removal and replacement of any tree(s) that have been topped or excessively trimmed.

#### **30-5-4.10 Penalties**

- (A) Tree Disturbance prior to permit approval: The penalty for the removal of or damage to trees, prior to the issuance of a tree disturbance permit or TRC approval shall be a civil penalty of ten thousand (10,000) dollars per acre or fraction thereof. (i.e., The civil penalty for a site of 0.35 acres that is cleared prior to TRC approval or prior to the issuance of a tree disturbance permit is \$3500.)
- (B) Removal or damage to Individual Trees after Permit Approval: The penalty for removal of or damage to the Critical Root Zone of a protected tree(s) after the issuance of a Tree Disturbance Permit, or TRC approval, within an approved TCA without approval by the City Urban Forester shall result in a civil penalty as determined by the City Urban Forester, up to the amount shown in the chart below, in addition to the replacement of those trees with quality specimens native to North Carolina.

DBH of Tree Removed or Damaged	Maximum Civil Penalty	Reforestation (4 inch DBH minimum)
4-11.9 inches	\$800	1 tree
12-20.9 inches	\$1600	2 trees
21-28.9" inches	\$2400	3 trees
29-35.9" inches	\$3200	4 trees
36+ inches	\$4000	5 trees

- (C) Removal of an Area of Trees after Permit Approval: The penalty for removal of or damage to an area of protected trees that have not been surveyed after the issuance of a Tree Disturbance Permit or TRC approval, within an approved TCA without approval of the City Urban Forester shall result in a civil penalty of ten thousand (10,000) dollars per acre or fraction thereof but not less than one thousand (1000) dollars. Such areas shall be reforested at a rate of one (1), two (2) inch caliper canopy tree per two hundred (200) square feet.
- (D) Failure to Install or Maintain Tree Protection Devices: There shall be a civil penalty of five hundred (500) dollars per day for failure to install or maintain approved tree protection measures sufficient to protect the TCA beginning with the date the citation is issued and ending when the site is in compliance. The property owner may be subject to any penalties for damage under section B above.

- (E) Failure to comply with the Landscape provisions: There shall be a penalty of five hundred (500) dollars per day for failure to install required landscape material or to replace dead landscape material beginning with the date the citation is issued and ending when the site is in compliance.

#### **30-5-4.11 Alternate Methods of Compliance**

(A) General Provisions:

- 1) Alternate landscaping plans, plant materials, planting methods or reforestation may be used where unreasonable or impractical situations would result from application of landscaping or tree preservation requirements. Such situations may result from streams, natural rock formations, topography, or other physical conditions; or from lot configuration, utility easements, unified development design, or unusual site conditions.
- 2) The Enforcement Officer may approve an alternate plan, which proposes different plant materials or methods provided that quality, effectiveness, durability, and performance are equivalent to that required by this Section 30-5-4 Landscaping and Tree Preservation Requirements. The performance of alternate landscaping plans or tree preservation plans shall be reviewed by the City Urban Forester or Enforcement Officer to determine if the alternate plan meets the intent and purpose of this Section 30-5-4 Landscaping and Tree Preservation Requirements. This determination shall take into account the land use classification of adjacent property, number of plantings, species, arrangement and coverage, location of plantings on the lot, and the level of screening, height, spread, and canopy of the plantings at maturity.
- 3) Decisions of the Enforcement Officer regarding alternate methods of compliance for landscaping may be appealed to the Technical Review Committee as requests for modifications. Decisions of the City Urban Forester regarding alternate methods of compliance for tree preservation and reforestation may be appealed to the Advisory Commission on Trees (ACT).
- 4) Appeals from a decision of the Advisory Commission on Trees (ACT) with regard to alternate methods of compliance shall be to the Board of Adjustment in the nature of certiorari.

(B) RESERVED